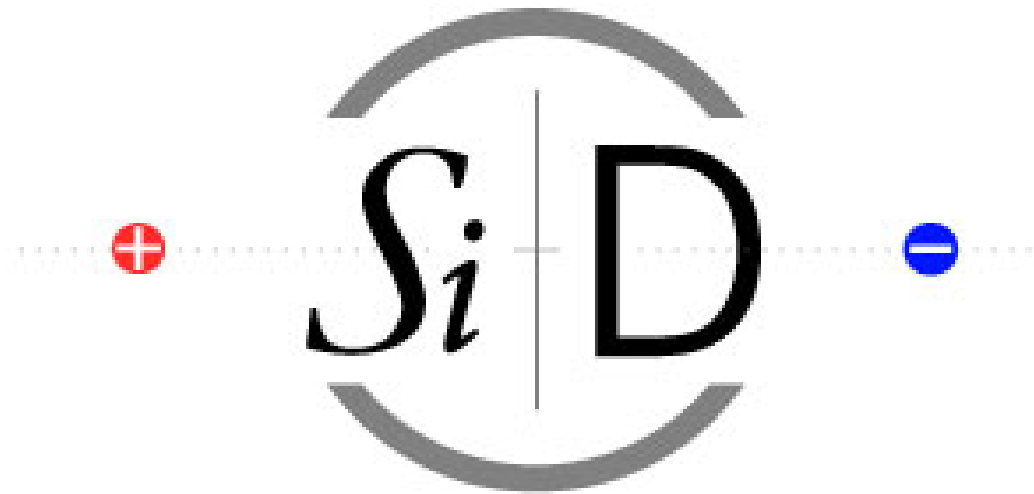


Goals for the Workshop



SiD SLAC Workshop
January 28, 2008
John Jaros

Goals Pre-Omnibus

Goals were pretty clear: Get moving on the LOI!

- Get PFA and Track Reconstruction Working and Useable for design studies
- Make a first pass at the global parameters
- Proceed with Conceptual Engineering
- Prepare for Benchmarking
- Review Progress on Detector R&D Fronts

All Hell Breaks Loose Here

Quo Vadis Post Omnibum?

Same old goals, but lots of questions:

- Are we still standing?
- Is ILC still standing?
- Is R&D still funded?
- Is LOI still coming?
- Can SiD still optimize, design, engineer, and benchmark?
- Can SiD still deliver an LOI?

GOAL #1: Answer these questions

11:00->12:30 State of SiD and ILC Support

Description:

Chair: Andy White

WebEx Meeting Number: 590 245 510

WebEx Password: sidworkshop

11:00 View from DOE (25)

Gerald Blazey (NIU)

11:25 Panel Discussion on
State of SiD Support
(1h05)

Jim Brau (U. Oregon) , Philip Burrows (Oxford University) , Harry Weerts (Argonne National Laboratory) ,
John Jaros (SLAC) , Marcel Demarteau (Fermi National Accelerator Laboratory (FNAL)) , Hiro Aihara (Tokyo
Univ.) , Yannis Karyotakis (Lab. d'Annecy-le-Vieux de Phys. des Particules (LAPP/IN2P3/CNRS Uni. de
Savoie))

The glass is more than ½ full

- There's been lots of progress on engineering, benchmarking, KPiX, PFA, track reconstruction, optimization,...
- ILC and GDE are moving forward, but goals and schedules are changing.
- There will be an LOI. Proposed due date April 1, 2009.
- SiD's goals are unchanged. But plans must adapt to reality.
SiD has done a lot of work toward generating a sound conceptual design and has made real progress in creating the tools needed to optimize the detector.

Generating an optimized, realistic design has been our goal from the start.

We can and should continue this work, document our results, and submit an LOI.

GOAL #2: Commit to SiD LOI on new timetable.

GOAL #3: Get on with business

- Get PFA and Track Reconstruction Working and Useable for design studies
- Make a first pass at the global parameters
- Proceed with Conceptual Engineering
- Prepare for Benchmarking
- Review Progress on Detector R&D Fronts

GOAL #4: Plan Next Steps

We know the steps. We need a new schedule.

1. Draft First Pass Global Parameters
2. Freeze Global Parameters; Draft First Pass Detector Design.
3. Freeze Detector Design.
 - Fully specify subsystem designs
 - Select technologies/alternates
 - Ready conceptual engineering designs
4. Complete GEANT4 description
 - Have subsystem performance codes ready
 - Have benchmarking codes ready
5. Document SiD physics performance and subsystem performance
6. Draft CDR/LOI

10:40->13:00 Future Plans for SiD

Description:

Session Chair: John Jaros

WebEx Meeting Number: 590 245 510

WebEx Password: sidworkshop

10:40 Panel Discussion on Subsystem Plans (1h00)

11:40 What Next? (45)

12:25 Closing Remarks (30)

Spreadsheet or no, we still need plans from the subsystems: schedule, milestones, people.

Harry Weerts (Argonne National Laboratory)

GOAL #5: Decide Next Meeting/Next Step

Present plan is to meet at RAL, April 14-16. Do we stick to it?

Plusses

1. Have support of RAL now, maybe not later
2. Good chance to recruit Europeans for SiD
3. Convenient time for other European meetings (RD51,...)
4. UK still has support for SiD. How much longer?

Minuses

1. Can we get enough done by April 14 to justify?
2. Hard to send US physicists with LC travel restrictions
3. Some will have to go back to Europe anyway for ECFA (June 9-13)

We should clarify what we hope to accomplish with this meeting. Originally, it was “freeze global params and draft first pass subsystem designs.” Still?

GOAL #6: Consider SiD at other LCs

SiD is a great LC detector, not just a great ILC detector. It's speed and robustness make it a natural for future warm designs like CLIC as well as ILC.

New Questions for SiD to begin thinking about:

- What is the physics case for $>1\text{TeV}$ physics, and must the SiD design be adapted to handle it?
- What are the backgrounds at CLIC? What must be done to handle them?
- How does the CLIC time structure impact SiD's electronics and DAQ?

Wednesday 30 January 2008

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08:30->10:10 Electronics, Forward, Muon, and Machine

Description:

Chair: Tom Markiewicz

WebEx Meeting Number: 590 245 510

WebEx Password: sidworkshop

08:30	Electrical Engineering Report (25)	Gunther Haller (SLAC)
08:55	Forward Detector R&D Status and Plans (25)	Bill Morse (BNL)
09:20	Muon Detector R&D Status and Plans (25)	
09:45	IP and Bunch Parameters for Various Linear Colliders (25)	Andrei Seryi (SLAC)

Andrei's talk

Lots to Discuss

Welcome to SLAC!

SiD has lots to discuss, learn, and decide at this meeting.

SiD can adapt to “interesting times”!